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Rod R. Blagojevich, Governor

August 29, 2006

Mr. Bill Boyd - Union County Engineer 306 Mississippi Street P.O. Drawer "K" Jonesboro, Illinois 62952

RE:

Incidental Take Authorization - Conservation Plan Review (Bigeye Shiner) Bridge Replacement/Realignment over Cany Creek, Union County, Illinois

#### Dear Bill:

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) the Union County Highway Department's (UCHD) authorization for the incidental take of the State endangered Bigeye Shiner (*Notropis boops*) in Union County, Illinois [associated with the bridge replacement over Cany Creek] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the Cany Creek bridge replacement in Union County.

Please have an authorized Union County Highway Department Official(s) sign the last page of both copies of the Authorization and Implementing Agreement and return **both** copies to my the attention. Upon receipt, I will have the agreements signed and return one (1) fully executed copy to you for your official records. This authorization shall be effective once signed by the Department.

Thank you for your cooperation and assistance during the incidental take preparation and review process. Please do not hesitate to contact our office at (217)782-6384 with any questions or comments you may have regarding this authorization agreement.

Sincerely,

Joseph A. Kath

Terrestrial Endangered Species Project Manager

IDNR-Office of Resource Conservation

Enclosures

## Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) the UCHD's authorization for the incidental take of the State endangered Bigeye Shiner (*Notropis boops*) in Union County, Illinois (as described/shown in the conservation plan received by the Department on 11 May 2006) is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the replacement of the bridge over Cany Creek in Union County.

### Procedural History

The Union County Highway Department (acting through its environmental consultant, J.T. Blankinship & Associates) prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and UCHD's request for authorization for incidental take of the bigeye shiner were received by the Illinois Department of Natural Resources (Department) on 11 May 2006. Public notice of UCHD's request for authorization of incidental take of the bigeye shiner was published in the Edwardsville Intelligencer (Official State newspaper) and The Gazette-Democrat on June 1, 2006, as well as on June 8, 2006 and June 15, 2006. Public comments on UCHD's conservation plan were accepted by the Department until July 15, 2006. No comments were received by the public during the period of June 1, 2006 through July 15, 2006.

# Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The stated and apparent purpose of this proposed action is to realign a portion of Township Road (TR) 131, realignment of approximately 200 feet of Cany Creek, construction of a new bridge over the realigned portion of Cany Creek, demolition of the existing bridge, and filling a portion of the existing channel of Cany Creek.

In September of 2005, representatives from the Illinois Natural History Survey found suitable habitat for the bigeye shiner throughout the project site. Several bigeye shiner individuals were netted at the project bridge and downstream of the project site. These state listed endangered species could likely be affected (some take will likely occur) by project related construction activity and/or any siltation produced by these efforts. This take is not the purpose of UCHD efforts, but is incidental to the carrying out of an otherwise lawful activity.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

The UCHD realizes that the only alternative that would not result in the take of State listed fish is the "do-nothing" alternative, which means that the subject bridge over Cany Creek would not be replaced. According to the UCHD, this alternative is an unacceptable and would result in leaving the existing structurally deficient bridge in place. The existing bridge would eventually deteriorate to the point that it would have to be closed; thereby resulting in undue hardship on the agricultural community and other residents in the area. A second alternative would be to construct a new bridge at the same location as the existing bridge. This would likely still result in a take since in-channel work would be required to construct the new bridge. Also, constructing the new bridge at this location would result in a much sharper turn at the northern end of the bridge which would not meet the minimum design standards of the Illinois Department of Transportation. Project related construction activity and/or any siltation produced by these efforts may result in the direct removal, crushing, and/or burying of bigeye shiners which certainly constitutes a "take" under the Act.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

The UCHD realizes that the only alternative that would not result in the take of State listed fish is the "do-nothing" alternative, which means that the subject bridge over Cany Creek would not be replaced. According to the UCHD, this alternative is an unacceptable and would result in leaving the existing structurally deficient bridge in place. The existing bridge would eventually deteriorate to the point that it would have to be closed; thereby resulting in undue hardship on the agricultural community and other residents in the area. Plans were prepared and funding secured for bridge reconstruction and realignment to occur in calendar year 2006 or 2007. Per the Conservation Plan: As a unit of local government, Union County (Union County Highway Department) has adequate funding to undertake (all) measures proposed - the project is funded with County funds and Federal bridge funds through the Illinois Department of Transportation [The project is authorized by IDOT, which receives funding from the Illinois General Assembly and the Federal government in carrying out its programs]. The Cany Creek bridge realignment at Township Road 131 is located in the northeast quarter of the southeast quarter of Section 20 of Township 12S, Range 2W, of the 3rd PM in Union County, west of Berryville. The bridge is owned by the Union County Highway Department (Union County, Illinois).

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

The bigeye shiner is listed as endangered in Illinois because it was formerly considered common in the Little Vermilion and the Little Vermilion rivers but has always been relatively rare and sporadic in the rest of the state; essentially it has earned a "narrow range" classification by the IDNR, meaning that less than 10% of the state area comprises this animal's current range. An aquatic survey of nearby Dutch Creek in Union County was performed by IDNR Streams

Biologist, Randy Sauer, on 11 August 1987. In 28 minutes of AC electric seining, five (5) individual bigeye shiners were collected. Habitat was mostly pools over sand and gravel with no aquatic vegetation present. Project related construction activity and/or any siltation produced by these efforts may result in the direct removal, crushing, and/or burying of bigeye shiners which certainly constitutes a "take" under the Endangered Species Act.

The bigeye shiner occurs in clear, high gradient streams over clean gravel or mixed sand and gravel, often near emergent vegetation along the stream margin. It apparently avoids strong currents. Unfortunately, siltation, increased turbidity, and impoundments have caused a significant decrease in the abundance of this species within Illinois. Efforts are needed to prevent continued declines in water quality in Illinois streams if our native stream fauna is to remain intact.

Due to the acreage being disturbed fro the proposed improvement, this project shall be constructed under the requirements of an Illinois Environmental Protection Agency (IEPA) Stormwater NPDES permit. This permit requires that a Storm Water Pollution Prevention Plan be developed which outlines temporary and permanent erosion control measures to be utilized to minimize erosion and siltation from the construction area.

In order to minimize siltation downstream of the subject channel and minimize the potential take of bigeye shiners, all construction (defined as): realignment of approximately 200' of Cany Creek, construction of a new bridge on the realigned portion of Cany Creek, demolition of the existing bridge, and filling of a portion of the existing channel of Cany Creek - shall be completed during a non-spawning period (October 1 - February 15). In addition, banks will be restored to their pre-dredging condition(s) and all bank-side vegetation disturbed during spoil removal/construction shall be replaced with a native seed mixture and/or plugs (species shall be approved by the Department prior to planting). A final approval of bank-side post dredging conditions shall be made by Department staff.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and Union County Highway Department official signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

The Union County Highway Department (acting through its environmental consultant, J.T. Blankinship & Associates) prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and UCHD's request for authorization for incidental take of the bigeye shiner were received by the Illinois Department of Natural Resources (Department) on 11 May 2006. Public notice of UCHD's request for authorization of incidental take of the bigeye shiner was published in the Edwardsville Intelligencer (Official

State newspaper) and The Gazette-Democrat on June 1, 2006, as well as on June 8, 2006, and June 15, 2006. Public comments on UCHD's conservation plan were accepted by the Department until July 15, 2006. No comments were received by the public during the period of June 1, 2006 through July 15, 2006.

#### <u>Authorization</u>

It is the determination of the Department that the measures to be implemented by the Union County Highway Department [all in-water work for this project shall be completed during a non-spawning period (October 1 - February 15)] will adequately minimize and mitigate for the possible taking of the State endangered bigeye shiner in Union County, Illinois [associated with the Cany Creek bridge replacement and realignment].

All construction (defined as): realignment of approximately 200' of Cany Creek, construction of a new bridge on the realigned portion of Cany Creek, demolition of the existing bridge, and filling of a portion of the existing channel of Cany Creek - shall be completed during a non-spawning period (October 1 - February 15). Any construction that results in new disturbances to the river bottom and/or excessive turbidity while spawning is in progress shall not occur, nor is permitted under this Incidental Take Authorization. Further, it is our opinion that the restrictions authorized herein would not diminish the likelihood of the survival of the bigeye shiner in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

- 1. This authorization is effective upon signature of the Department and shall remain in effect for a period of <a href="mailto:three">three (3)</a> years [commencing at the start of in-stream realignment of Cany Creek], unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 17 IL. Adm. Code Part 1080.80].
- 2. In order to minimize siltation downstream of the subject channel and minimize the potential take of bigeye shiners, all construction: realignment of approximately 200' of Cany Creek, construction of a new bridge on the realigned portion of Cany Creek, demolition of the existing bridge, and filling of a portion of the existing channel of Cany Creek shall be completed during a non-spawning period (October 1 February 15).

Banks will be restored (by the Union County Highway Department) to their pre-construction condition and all bank-side vegetation disturbed during construction shall be replaced with a native seed mixture (species shall be approved by the IDNR, Joseph Kath or District Biologist Bob Lindsay @ 618-995-2568, prior to planting). During construction, the applicant shall make every effort to minimize bank-side erosion.

3. Within 12 months after construction of the new bridge over the realigned portion of Cany Creek is complete, the Union County Highway Department (or authorized unit of local government for Union County, Illinois) shall donate no less than \$1,500.00 to the "Illinois Wildlife Preservation Fund". As a means of mitigation for the effects of this construction effort,

these funds will be directly applied towards professional surveys/inventories of creeks and streams within Union County, Illinois. These inventories (and any subsequent species relocations) will help Departmental staff determine how many extant populations of the State endangered bigeye shiner (*Notropis boops*) exist within the subject watershed and greater Union County. This population information will provide a source for recovery of this species with regards to future incidental take applications in the project area and greater southern Illinois. A check or money order made out to the "Illinois Wildlife Preservation Fund" for an amount no less than \$1,500.00 shall be sent to the following address:

Illinois Department of Natural Resources
Division of Natural Heritage
Attn: Joseph Kath
One Natural Resources Way
Springfield, Illinois 62702-1271

- 4. The effective period of this authorization may be altered by mutual agreement between the Union County Highway Department and the Department.
- 5. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that the Union County Highway Department has failed to comply with any of these terms and conditions or has been responsible for the take of any State endangered Bigeye Shiners (*Notropis boops*) in Union County, Illinois, associated with the bridge replacement/realignment over Cany Creek.
- 6. The Union County Highway Department official identified below is authorized to execute this agreement. Execution by the Union County Highway Department indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources

Mike Conlin, Acting Director
Office of Resource Conservation

8.34.06

Date Signed

For the Union County Highway Department

Signature

Please print name and official title

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